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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/624,109

07/21/2003

David E. McMechan

2001-IP-003050 U1 USA

6120

32376

7590

02/23/2006

LAWRENCE R. YOUST  
DANAMRAJ & YOUST, P.C.  
5910 NORTH CENTRAL EXPRESSWAY  
SUITE 1450  
DALLAS, TX 75206

EXAMINER

GAY, JENNIFER HAWKINS

ART UNIT

PAPER NUMBER

3672

DATE MAILED: 02/23/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/624,109

Applicant(s)

MCMECHAN ET AL.

Examiner

Jennifer H. Gay

Art Unit

3672

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 21 December 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-49 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-49 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                                    |

## DETAILED ACTION

Applicant's request for reconsideration of the finality of the rejection of the last Office action is persuasive and, therefore, the finality of that action is withdrawn.

### ***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

2. Claims 1-49 are rejected under 35 U.S.C. 102(b) as being anticipated by Wetzel et al. (US 6,817,410).

*Regarding claims 1, 12, 14, 15:* Wetzel et al. discloses an apparatus for treating a production interval of a wellbore, the apparatus comprising:

- A packer assembly **46**;
- A sand control screen **28** connected relative to the packer assembly;
- A cross-over assembly (3:4-6) providing a lateral communication path downhole of the packer assembly for delivery of a treatment fluid and a lateral communication path **26** (3:49-59) uphole of the packer assembly for a return fluid;
- A wash pipe or base pipe assembly **70** in communication with the lateral communication path uphole of the packer assembly and extending into an interior of the sand control screen;
- At least one sensor **62** operably associated with the wash pipe assembly, the sensor operable to collect data relative to at least one property of the treatment fluid during a treatment process such that a characteristic of the treatment fluid is regulatable during the treatment process based upon the data (10:16-34).

*Regarding claims 2, 13, 23:* The wash pipe comprises: a body that includes a plurality of composite layers and a substantially impermeable layer lining an inner

surface of the innermost composite layer forming a pressure chamber (5:55-57); and an energy conductor **60** integrally positioned within the body (Figure 7).

*Regarding claim 3:* The sensor is coupled to the energy conductor.

*Regarding claim 4:* The energy conductor comprises an optical fiber (4:1-12).

*Regarding claims 5, 23, 37:* The energy conductor provides for communication between the sensor and the surface (4:1-12).

*Regarding claims 6, 24, 38:* The energy conductor provides for communication between the sensor and a downhole processor (4:1-12).

*Regarding claims 7, 18:* The apparatus includes a series of sensors embedded within the body of the wash pipe at predetermined intervals that collect data relative to the at least one property of the treatment fluid as a function of position (10:9-15).

*Regarding claims 8, 19, 25-31, 39-45:* The at least one property monitored by the sensor is selected from the group consisting of viscosity, temperature, pressure, velocity, specific gravity, conductivity and fluid composition (4:14-34).

*Regarding claims 9, 20, 33-35, 47-49:* The characteristic of the treatment fluid that is regulated is selected from the group consisting of fluid viscosity, proppant concentration and flow rate (9:56-10:34).

*Regarding claim 10:* The apparatus includes a downhole mixer (Figure 2).

*Regarding claims 11, 21, 32, 46:* The treatment process is selected from the group consisting of gravel packing, frac packing, acid treatments, conformance treatments, resin consolidations and chemical treatments.

*Regarding claim 16:* The sensor is embedded within an inner surface of the tubular (Figures 6 and 7).

*Regarding claim 17:* The sensor is embedded within an exterior surface of the tubular (Figures 5 and 6).

*Regarding claims 23, 36:* Wetzel et al. further discloses the method for treating a production interval using the above apparatus.

### ***Response to Arguments***

3. Applicant's arguments filed December 21, 2006 have been fully considered but they are not persuasive.

Applicant has argued that Wetzel et al. does not teach regulating a characteristic of a treatment fluid **during the treatment process**. Applicant further note that column 9, line 56 – column 10, line 24 specifically teach remedial action taking place after the treatment process is complete.

First, the examiner notes that the treatment process is considered to run until fully complete, i.e. the treatment and all remedial actions are stopped and equipment removed. Thus, even using applicant's interpretation of the reference, Wetzel et al. teaches regulating a characteristic of a treatment fluid during the treatment process.

Secondly, Wetzel et al. specifically teaches taking remedial action such as injecting additional material into the wellbore is the sensed data is not at desired levels. This is considered to be a teaching of regulating a characteristic of treatment fluid as the additional of material to the wellbore will change many physical and chemical properties of the treatment fluid. Further, there is no specific recitation in Wetzel et al. that this remedial action takes place after the treatment process is completely stopped.

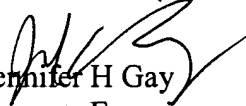
### ***Conclusion***

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jennifer H. Gay whose telephone number is (571) 272-7029. The examiner can normally be reached on Monday-Thursday, 6:30-4:00 and Friday, 6:30-1:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Bagnell can be reached on (571) 272-6999. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 3672

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Jennifer H Gay  
Primary Examiner  
Art Unit 3672

JHG  
February 16, 2006